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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,167	09/12/2003	Dmitry M. Smirnov	021756-017900US	7522

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EXAMINER
GOFMAN, ALEX N

ART UNIT	PAPER NUMBER
2162	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/661,167	SMIRNOV ET AL.
	Examiner	**Art Unit**	
	ALEX GOFMAN	2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 September 2010</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>32-42,44,45,48,50-52,56,59,60 and 65-68</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>32-42,44,45,48,50-52,56,59,60 and 65-68</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>12 September 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee

set forth in 37 CFR 1.17(e), was filed in this application after final rejection.

Since this application is eligible for continued examination under 37 CFR 1.114,

and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the

previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on September 8, 2010 has been entered.

Response to Arguments

2.   Applicant's arguments have been considered but are moot in view of the

new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 32-42, 44-45, 48, 50-52, 56, 59-60 and 65-68 are rejected under 35

U.S.C. 103(a) as being unpatentable over Lee (US Patent Application Publication

2002/0129024), hereinafter, Lee in view of Chung et al (US Patent 6,850,947),

hereinafter, Chung and further in view of Micco et al (US Patent Application

Publication 2003/0056203), hereinafter, Micco.

Claim 32: Lee discloses a method of transforming data, the method

comprising:

a. positioning a definition pointer to point at a first compound transform

definition within a transform definition file [0321]. [The program identifies entries

for a name, Bob Smith. The name may serve as a specific identifier like a pointer.

Information related to Bob Smith is found and transformed into the appropriate

format.]

b. invoking a processing thread to read the pointed at first compound

transform definition [0321].

c. searching data to be transformed for a data element to be transformed,

the search being responsive to the first compound transform definition [0321].

d. Lee discloses calling a dynamic function defined in the transform

definition file [0302, 0331; The calling of the peripheral program is "part of the

translation process" and thus part of the transformation process], but does not

explicitly disclose *the dynamic function located elsewhere in the transform*

definition file from the definition pointer position. However, Micco [0019] does.

Micco [0019] discloses finding an appropriate "language function in the library source file" and "using the derived information to translate the source language function call into a corresponding target language function call." This means that the call to translate a function as well as the translation function is located in the same file.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee with Micco. One would have been motivated to do so in order to be able to call and translate the specified input.

Lee as modified further discloses:

e. transforming any found data element into an output data file, responsive to the first compound transform definition and called dynamic function, a data structure of the output data file being responsive to a data structure of the first compound transform definition [0321, 0323, 0329].

f. positioning a definition pointer to point at a second compound transform definition within the transform definition file [0321].

g. invoking a second processing thread to read the pointed at second compound transform definition [0321, 0323]. [*The pointing to a specific "process definition" is done once a specific template is identified.*]

h. searching data to be transformed for another data element to be transformed, the search being responsive to the second compound transform definition [0321, 0323].

i. transforming any found data element into the output data file, responsive

to the second compound transform definition, the data structure of the output

data file being responsive to the data structure of the second compound

transform definition [0308].

Lee, as discussed above, discloses data transformation using a plurality of

templates (templates are similar to transform definitions). However, Lee lacks the

concurrent/parallel processing of multiple transform definitions.

However, Chung discloses it (Col 7 In 15-22; Col 7 In 52-66). Chung

discloses concurrently transforming data with multiple transformation definitions.

The transform definitions are for example, aggregation transformation, filter

transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at

the time the invention was made to modify Lee with Chung. One would have

been motivated to do so in order to concurrently transform data so that "data

contention is reduced and throughput is increased."

Claim 33: Lee as modified discloses the method of Claim 32 above and

further discloses determining a type of the read first compound transform

definition and, based on a determination that the first compound transform

definition is compound, recursively calling the method of claim [0247, 0305,

0312].

Claim 34: Lee as modified discloses the method of Claim 32 above and further discloses including determining if all sub-definitions of a compound transform definition have been processed [0293, 0305, 0312].

Claim 35: Lee as modified discloses the method of Claim 32 above and further discloses wherein the method of transforming data includes nesting of a data element [0305, 0312].

Claim 36: Lee as modified discloses the method of Claim 32 above and further discloses if no data element is found in the step of searching data to be transformed, adding an output data file element to the output data responsive to the read first compound transform definition, the data to be transformed having no contribution to the output data element [0308, 0329].

Claim 37: Lee as modified discloses the method of Claim 32 above and further discloses wherein the read transform definition includes a value parameter configured to specify a value for inclusion in the output data file [0318].

Claim 38: Lee as modified discloses the method of Claim 32 above and further discloses wherein the data element is a compound data element and the read transform definition includes a source record parameter configured to specify the compound data element [0308].

Claim 39: Lee as modified discloses the method of Claim 32 above and

further discloses wherein the read first compound transform definition is in a

meta-language format [0308, 0312].

Claim 40: Lee as modified discloses the method of Claim 32 above and

further discloses wherein the data to be transformed data is in a meta-language

data format [0308].

Claim 41: Lee as modified discloses the method of Claim 32 above and

further discloses wherein the read first compound transform definition includes a

transform element having an output field name and a source field parameter

[0305, 0308, 0312].

Claim 42: Lee as modified discloses the method of Claim 32 above and

further discloses wherein the read first compound transform definition includes a

value parameter configured to populate a field in the output data file [0305, 0308,

0312].

Claim 44: Lee discloses a method of transforming data, the method

comprising:

a. positioning a definition pointer to point at a transform definition, the first

compound transform definition being one of a plurality of transform definitions

within a transform definition file [0321].

b. invoking a first processing thread to read the pointed at first compound transform definition and sub-definitions of the first compound transform definition [0321].

c. positioning a first payload pointer to point at a data element to be transformed, the positioning being responsive to a data structure of the first compound transform definition [0321].

d. <u>Lee</u> discloses calling a dynamic function defined in the transform definition file [0331; The calling of the peripheral program is "part of the translation process."], but does not explicitly disclose *the dynamic function located elsewhere in the transform definition file from the definition pointer position*. However, <u>Micco</u> [0019] does.

<u>Micco</u> [0019] discloses finding an appropriate "language function in the library source file" and "using the derived information to translate the source language function call into a corresponding target language function call." This means that the call to translate a function as well as the translation function is located in the same file.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify <u>Lee</u> with <u>Micco</u>. One would have been motivated to do so in order to be able to call and translate the specified input.

<u>Lee</u> as modified further discloses:

e. transforming the first data element into an output data file, responsive to

the read first compound transform definition and called dynamic function [0321,

0323, 0329].

f. positioning the definition pointer to point at a second compound

transform definition, the second compound transform definition being within the

transform definition file [0321].

g. invoking a second processing thread to read the pointed at second

compound transform definition and sub-definitions of the second compound

transform definition [0321, 0323].

h. positioning a second payload pointer to point at a second data element

to be transformed, the positioning of the second payload pointer being

responsive to a data structure of the second compound transform definition

[0321, 0323].

i. transforming the second data element into the output data file,

responsive to the read second compound transform definition [0308].

Lee, as discussed above, discloses data transformation using a plurality of

templates (templates are similar to transform definitions). However, Lee lacks the

concurrent/parallel processing of multiple transform definitions.

However, Chung discloses it (Col 7 ln 15-22; Col 7 ln 52-66). Chung

discloses concurrently transforming data with multiple transformation definitions.

The transform definitions are for example, aggregation transformation, filter transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee with Chung. One would have been motivated to do so in order to concurrently transform data so that "data contention is reduced and throughput is increased."

Claim 45: Lee as modified discloses the method of Claim 44 above and further discloses determining a type of the read first compound transform definition and, based on a determination that the first compound transform definition is compound, recursively calling the method of claim 44 [0247, 0305, 0312].

Claim 48: Lee as modified discloses the method of Claim 44 above and further discloses further including determining if all sub-elements of a compound element have been transformed and, if the determination returns a value of YES, returning to a calling process [0305, 0308, 0312].

Claim 50: Lee as modified discloses the method of Claim 44 above and further discloses including un-nesting of the data element to be transformed [0305, 0308, 0312].

Claim 51: Lee as modified discloses the method of Claim 44 above and further discloses wherein the read first compound transform definition includes a source field parameter configured to specify the data element [0308].

Claim 52: Lee as modified discloses the method of Claim 44 above and further discloses wherein the read first compound transform definition includes a source record parameter configured to specify the compound data element [0305, 0308, 0312].

Claim 56: Lee as modified discloses the method of Claim 53 above and further discloses wherein the transform definition file includes a tree data structure [0139].

Claim 59: Lee discloses a computer readable media having embodied thereon data, the data comprising:

a. computer instructions configured to position a definition pointer to point at a first compound transform definition, the first compound transform definition being within a transform definition file [0305, 0307, 0312].

b. computer instructions configured to invoke a first processing thread to read the pointed at first compound transform definition and sub-definitions of the first compound transform definition [0305, 0307, 0312].

c. computer instructions configured to position a first payload pointer to point at a first data element to be transformed, the positioning being responsive to a data structure of the first compound transform definition [0305, 0307, 0312].

d. computer instructions configured to call a dynamic function defined in the transform definition file [0331; The calling of the peripheral program is "part of the translation process."], but does not explicitly disclose *the dynamic function*

located elsewhere in the transform definition file from the definition pointer

position. However, Micco [0019] does.

Micco [0019] discloses finding an appropriate "language function in the

library source file" and "using the derived information to translate the source

language function call into a corresponding target language function call." This

means that the call to translate a function as well as the translation function is

located in the same file.

Therefore, it would have been obvious for one of ordinary skill in the art at

the time the invention was made to modify Lee with Micco. One would have been

motivated to do so in order to be able to call and translate the specified input.

Lee as modified further discloses:

e. computer instructions configured to transform the first data element into

an output data file, responsive to the read first compound transform definition and

called dynamic function [0305, 0307, 0312, 0329].

f. computer instructions configured to position a second payload pointer to

point at a second data element to be transformed, the positioning being

responsive to a data structure of the second compound transform definition

[0305, 0307, 0312].

g. computer instructions configured to invoke a second processing thread

to read the pointed at second compound transform definition and sub-definitions

of the second compound transform definition [0305, 0307, 0312].

h. computer instructions configured to transform the second data element

into the output data file, responsive to the read second compound transform

definition [0305, 0307, 0312].

Lee, as discussed above, discloses data transformation using a plurality of

templates (templates are similar to transform definitions). However, Lee lacks the

concurrent/parallel processing of multiple transform definitions.

However, Chung discloses it (Col 7 ln 15-22; Col 7 ln 52-66). Chung

discloses concurrently transforming data with multiple transformation definitions.

The transform definitions are for example, aggregation transformation, filter

transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at

the time the invention was made to modify Lee with Chung. One would have

been motivated to do so in order to concurrently transform data so that "data

contention is reduced and throughput is increased."

Claim 60: Lee as modified discloses the media of Claim 59 above, and

further discloses wherein the data further comprises computer instructions

configured to employ recursion to transform a compound data element within the

data to be transformed [0305, 0307, 0312].

Claim 65: Lee discloses an application system comprising:

a. means for positioning a definition pointer to point at a first compound

transform definition within a transform definition file [0321].

b. means for invoking a first processing thread to read the first compound transform definition by the computing device [0321].

c. Lee discloses means for calling a dynamic function defined in the transform definition file, [0331; The calling of the peripheral program is "part of the translation process."], but does not explicitly disclose *the dynamic function located elsewhere in the transform definition file from the definition pointer position*. However, Micco [0019] does.

Micco [0019] discloses finding an appropriate "language function in the library source file" and "using the derived information to translate the source language function call into a corresponding target language function call." This means that the call to translate a function as well as the translation function is located in the same file.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify Lee with Micco. One would have been motivated to do so in order to be able to call and translate the specified input.

Lee as modified further discloses:

d. means for positioning the definition pointer to a point at a second compound transform definition within the transform definition file [0305, 0307, 0312].

e. means for invoking a second processing thread to read the second compound transform definition by the computing device [0305, 0307, 0312].

f. means for positioning a payload pointer to point to a first data element,

the first data element being a member of a plurality of data elements within data

to be transformed [0305, 0307, 0312].

g. means for generating an output data file using the first data element and

the first and second compound transform definitions [0305, 0307, 0312, 0329].

h. wherein the means for positioning the definition pointer can be invoked

concurrently with the means for positioning the payload pointer [0304].

Lee, as discussed above, discloses data transformation using a plurality of

templates (templates are similar to transform definitions). However, Lee lacks the

concurrent/parallel processing of multiple transform definitions.

However, Chung does (Col 7 ln 15-22; Col 7 ln 52-66). Chung discloses

concurrently transforming data with multiple transformation definitions. The

transform definitions are for example, aggregation transformation, filter

transformation, rank transformation, etc.

Therefore, it would have been obvious for one of ordinary skill in the art at

the time the invention was made to modify Lee with Chung. One would have

been motivated to do so in order to concurrently transform data so that "data

contention is reduced and throughput is increased."

Claim 66: Lee as modified discloses the system of Claim 65 above, and

further discloses means for selecting the transform definition file from a set of

transform process definition files, responsive to data associated with the data to be transformed [0308].

Claim 67: <u>Lee</u> as modified discloses the system of Claim 65 above, and further discloses wherein a second data element has no contribution to output data generated, the second data element being a member of the plurality of data elements [0308].

Claim 68: <u>Lee</u> as modified discloses the system of Claim 65 above, and further discloses means for adding data to the output data file, the added data being configured responsive to the transform definition file and having no contribution from the data to be transformed [0308].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX GOFMAN whose telephone number is (571)270-1072. The examiner can normally be reached on Mon-Fri 9am-3pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571)272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from

the Patent Application Information Retrieval (PAIR) system. Status information

for published applications may be obtained from either Private PAIR or Public

PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

                                                      Alex Gofman
                                                      Examiner
                                                      Art Unit 2162

/Jean B. Fleurantin/
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